Amendments to the Claims

Please amend the claims as indicated below; cancel independent claims 1 and 18 and add corresponding new independent claims 32, 33 and 34 and dependent claim 35.

1. (cancelled)

2. (currently amended) The method according to claim ~~1~~ 32 wherein said plurality of clients is operated by a corresponding plurality of users and said VNG data store includes identification information related to said plurality of users.

3. (currently amended) The method according to claim ~~1~~ 32 wherein at least one of said plurality of clients is chosen from a group of network enabled devices comprising:

1) a personal computer;

2) a personal digital assistant;

3) a mobile cellular telephone;

4) a network appliance;

5) a digitally loadable music or video player;

6) an on-line video game; and

7) a home appliance.

4. (currently amended) The method according to claim ~~1~~ 32 wherein at least one of said plurality of communication channels is chosen from a group comprising:

1) Internet;

2) a cable network;

3) metropolitan area networks (MAN);

4) a power-line network;

5) a telephone line;

6) a satellite link; and

7) wireless networks.

5. (currently amended) The method according to claim ~~1~~ 32 wherein said information identifying each of said plurality of clients ~~attributes~~ includes, for each client:

1) an identification attribute, identifying said client; and

2) a PNC address attribute, identifying a network location of said client.

6. (currently amended) The method according to claim ~~1~~ 32 wherein said PNC network attributes include:

1) a security management attribute, identifying a network security level to which said PNC must adhere.

7. (currently amended) The method of claim ~~1~~ 32 further comprising:

E. selectively disestablishing said PNC in response to a termination event.

8. (currently amended) The method according to claim 7 wherein step E includes:

1) disassociating each of said designated virtual PNC addresses from said clients.

9. (Original) The method according to claim 7 wherein said termination event includes one of more of the following:

1) issuing a termination command by at least one of said clients to said VNG system;

2) detecting completion of a predefined set of tasks;

3) detecting a security violation; and

4) lapsing of a termination point in time.

10. (currently amended) The method according to claim ~~1~~ 32 further comprising:

E. modifying said PNC information ~~attributes~~; and

F. modifying said client links as a function of said modified PNC information ~~attributes~~.

11. (currently amended) The method of claim ~~1~~ 32, further comprising:

E. sending a packet across said PNC, from a first client to a second client, wherein said sending said packet includes:

1) grabbing a packet destined for the virtual network card;

2) identifying said packet;

3) wrapping said packet in a wrapper frame by said first client;

4) transmitting said packet from said first client and receiving said packet by

said second client;

5) unwrapping said packet by said second client, and

6) injecting said packet into a networking driver interface system of said second client, as if said packet was received by a standard network card of said second client.

12. (Original) The method of claim 11 wherein sub-step 4) includes:

a) sending said packet to a VNG server of said VNG system; and

b) forwarding said packet by said VNG server to a set of destinations clients, including said second client, associated with said packet.

13. (Original) The method of claim 12, wherein said first client implements a first protocol and said second client implements a second protocol, and wherein sub-step 3 includes wrapping said packet in a frame compatible with said first protocol and sub-step b) includes:

i. unwrapping said packet; and

ii. re-wrapping said packet in a frame that is compatible with said second protocol.

iii. transmitting said re-wrapped packet to said second client.

14. (Original) The method of claim 11, wherein sub-step 3) includes compressing said message according to said network attributes and sub-step 5) includes decompressing of said message.

15. (currently amended) The method of claim 11, wherein sub-step 3) includes encrypting said message according to said PNC network attributes and sub-step 5) includes decrypting said message.

16. (currently amended) The method of claim ~~1~~ 32, wherein said VNG system includes a billing manager, said method further comprising:

E. monitoring usage of said PNC by said plurality of ~~devices~~ clients and generating, as a function of said usage, a corresponding usage bill.

17. (currently amended) The method of claim ~~1~~ 32 wherein step B includes:

1) accessing a VNG system Web site.

18. (cancelled)

19. (currently amended) A VNG system according to claim ~~18~~ 33, further comprising:

~~D~~C. a PNC termination manager, configured to selectively terminate said PNC in response to a termination event.

20. (currently amended) A VNG system according to claim 19 wherein said termination manager is configured to disassociate each of said designated virtual PNC addresses from said clients.

21. (Original) A VNG system according to claim 19 wherein said termination event includes at least

one of the following:

1) issuing a termination command by at least one of said clients to said VNG system;

2) detecting completion of a predefined set of tasks;

3) detecting a security violation; and

4) lapsing of a termination point in time.

22. (currently amended) A VNG system according to claim ~~18~~ 33 wherein said plurality of clients is operated by a corresponding plurality of users and said VNG data store includes identification information related to said plurality of users.

23. (currently amended) A VNG system according to claim ~~18~~ 33 wherein at least one of said plurality of clients is chosen from a group of network enabled devices comprising:

1) a personal computer;

2) a personal digital assistant;

3) a mobile cellular telephone;

4) a network appliance;

5) a digitally loadable music or video player;

6) an on-line video game; and

7) a home appliance.

24. (currently amended) A VNG system according to claim ~~18~~ 33 wherein at least one of said

~~plurality~~ set of communication channels is chosen from a group comprising:

1) Internet;

2) a cable network;

3) metropolitan area networks (MAN);

4) a power-line network;

5) a telephone line;

6) a satellite link; and

7) wireless networks.

25. (currently amended) A VNG system according to claim ~~18~~ 33 wherein said client attributes include, for each client:

1) an identification attribute, identifying said client; and

2) a PNC address attribute, identifying a network location of said client.

26. (currently amended) A VNG system according to claim ~~18~~ 33, further including:

~~D~~C. a front end VNG system Web site.

27. (currently amended) A VNG system according to claim ~~18~~ 33 wherein said PNC network attributes include:

1) a security management attribute, identifying a network security level to which said PNC must adhere.

28. (currently amended) A VNG system according to claim ~~18~~ 33 wherein said PNC manager includes configured to:

a) PNC attribute modifier; and

b) PNC client link modifier, configured to modify said client links as a function of a set of modified PNC attributes.

29. (currently amended) A VNG system according to claim ~~18~~ 33, wherein each client in said PNC includes:

~~D~~C. a client module configured to wrap packets to be transmitted in a wrapper frame, wherein said wrapper frame is compatible with at least one of said plurality of communication channels and a corresponding communication protocol.

30. (currently amended) A VNG system according to claim ~~18~~ 33, wherein message traffic within said PNC is encrypted.

31. (currently amended) A VNG system according to claim ~~18~~ 33, wherein said VNG processing device further includes

~~5)~~ c. a usage monitor configured to monitor usage of said PNC by said plurality of clients and generate corresponding usage information; and

~~6)~~ d. a billing manager, configured to generate a corresponding invoice, as a function of said usage information.

32. (New) A method of establishing a private network community (PNC) among a plurality of clients configured to have access to one or more of a set of communication channels, said method comprising:

A. providing a virtual network generation (VNG) system including a VNG data store, the VNG system accessible via the set of communication channels;

B. storing in the VNG data store PNC information including information identifying said plurality of clients and information identifying a set of PNC network attributes;

C. accessing the VNG system by the plurality of clients and authenticating each of said plurality of clients with the VNG system by comparing information provided by the plurality of clients with said PNC information; and

D. establishing said PNC as a function of the PNC information, including:

a. designating a virtual PNC address for each of said plurality of clients;

b. linking said plurality of clients for communication within the PNC and controlled by the VNG system using the virtual PNC address of each of the plurality of clients and the set of PNC network attributes; and

c. emulating local area network (LAN) communications among the plurality of clients by the VNG system.

33. (New) A virtual network generation (VNG) system configured to establish and manage at least one private network community (PNC) among a plurality of clients configured to have access to one or more of a set of communication channels, said method comprising:

A. a VNG data store configured for storing PNC information including information

identifying at least one of said plurality of clients or of users of said plurality of clients and information identifying a set of PNC network attributes;

B. at least one VNG processing device coupled to said VNG data store and configured for establishing said PNC as a function of the PNC information, the at least one VNG processing device configured for executing a set of VNG system components comprising:

a. an authentication manager for authenticating each of said plurality of clients that have accessed the VNG system by comparing information provided by the plurality of clients with said PNC information; and

b. a set of communications components comprising:

i. an addressing component for designating a virtual PNC address for each of said plurality of clients;

ii. a linking component for linking said plurality of clients for communication within the PNC and controlled by the VNG system using the virtual PNC address of each of the plurality of clients and the set of PNC network attributes; and

iii. a network emulation component for emulating local area network (LAN) communications among the plurality of clients by the VNG system.

34. (New) A method of establishing a private network community (PNC) for a plurality of clients having access to one or more communication channels, the method comprising:

A. providing a virtual network generation (VNG) system including a VNG data store;

B. storing in the VNG data store PNC information including information identifying the

plurality of clients and information identifying PNC-specific network attributes;

C. accessing the VNG system by clients from the plurality of clients; and

D. selectively linking the accessing clients into the PNC, including enabling communications among the accessing clients controlled by the VNG system in accordance with the PNC network attributes, including the PNC emulating a private intranet controlled by the VNG system and providing a shared set of intranet resources to the accessing clients.

35. (New) The method of claim 34 wherein the private intranet is a local area network (LAN).